Feilongus

Feilongus is an extinct genus of ctenochasmatid pterodactyloid pterosaur from the Barremian-Aptian-age Lower Cretaceous Yixian Formation of Beipiao, Liaoning, China.

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Discovery and naming

The genus was named and described in 2005 by Wang Xiaolin, Alexander Kellner, Zhou Zhonghe and Diogenes de Almeida Campos. The type species is *Feilongus youngi*. The genus name is derived from *Feilong*, the "flying dragon". The specific name honours the Chinese paleontologist Yang Zhongjian (C. C. Young).

The holotype on display at the Paleozoological Museum of China (IVPP)

Feilongus is based on holotype IVPP V-12539, a skull and articulated mandible, with on the same plate the detached posterior braincase, of a subadult individual. The fossil is strongly crushed.

In 2014, a second specimen, DNMHM D3068 found at Gonggao, was referred to a *Feilongus* sp. It consists of a skull with lower jaws and four neck vertebrae. It was a possible subadult or, despite a smaller size, adult.[1]

Description

Feilongus

Temporal range: Early Cretaceous, 124.6 Ma

Pre€ € O S D C P T J K PgN

Recreation

Scientific classification	
Kingdom:	Animalia
Phylum:	Chordata
Order:	†Pterosauria
Suborder:	†Pterodactyloidea
Family:	†Ctenochasmatidae
Subfamily:	†Moganopterinae
Genus:	†*Feilongus* Wang *et al.*, 2005
Type species	
†***Feilongus youngi*** Wang *et al.*, 2005	

The wingspan of *Feilongus* was estimated by Wang e.a. to have been around 2.4 meters (7.9 feet), making it large for a basal pterodactyloid.

Feilongus is notable for having two bony crests on the skull (one long and low on middle of the snout, and one projecting backwards from the rear of the skull), and for the upper jaws being 10% or 27 millimetres longer than the lower jaws, giving it a pronounced overbite. The second specimen however, shows neither crests nor overbite. The preserved part of the second crest was short with the leading edge rounded, and may have had a nonbony extension, now lost. The skull of the holotype is 390-400 millimeters long (15.4-15.7 inches) and extremely elongated with a slightly concave top.

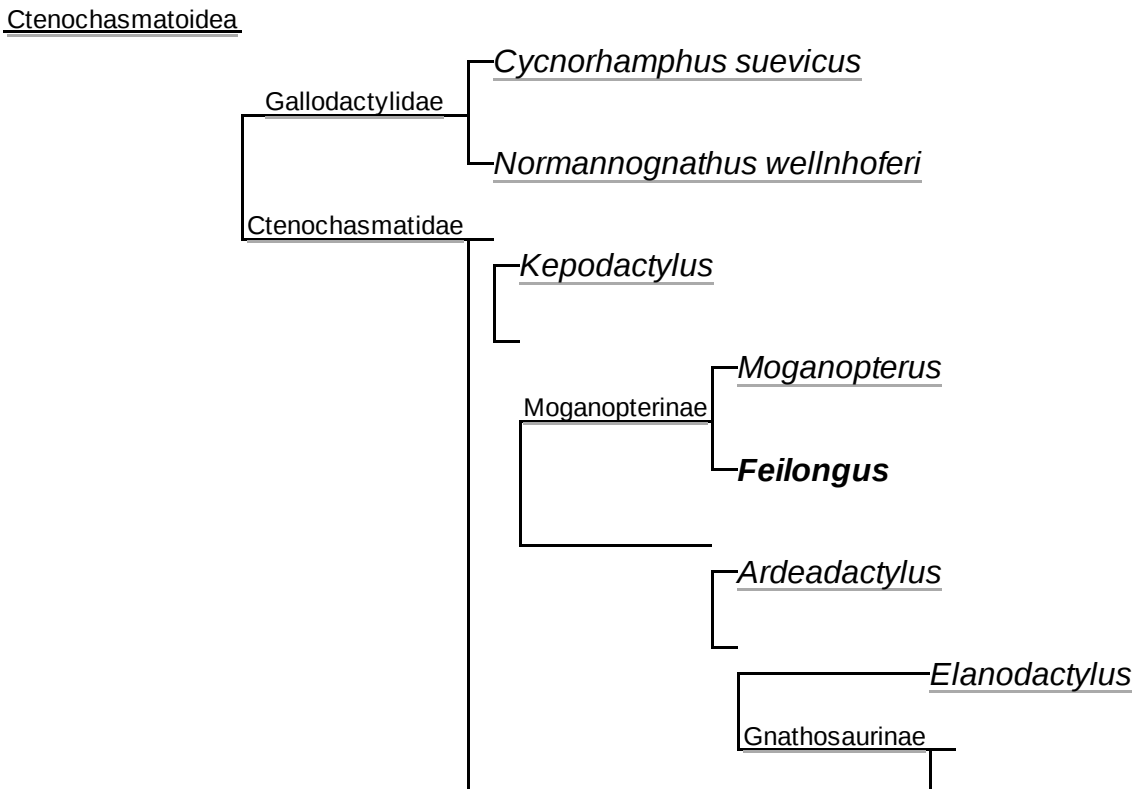
The skull and lower jaws held 76 long, curved needle-like teeth, eighteen in the upper, nineteen in the lower jaw, confined to the beak ends, the anterior third, of the jaws.[2] The second specimen had seventy-eight teeth.

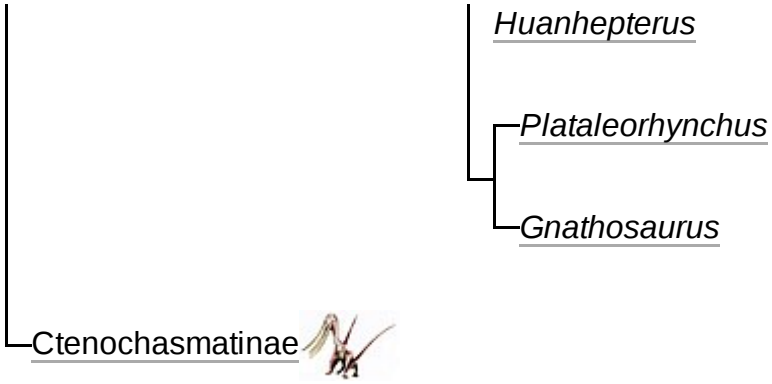
The neck vertebrae of the second specimen are very elongated, five times longer than wide.

Phylogeny

A cladistic analysis by the describers showed *Feilongus* as the sister taxon of a clade consisting of *Gallodactylus* and *Cycnorhamphus*, meaning it was a member of the Gallodactylidae *sensu* Kellner, a group of ctenochasmatoids, within the larger Archaeopterodactyloidea, the clade containing according to Alexander Kellner the most basal pterodactyloids.[2] The Ctenochasmatoidea are known for having numerous small, thin teeth, possibly for straining food from water, as flamingos do today.[3] However, in 2006 an analysis by Lü Junchang had as outcome that *Feilongus* was not an archaeopterodactyloid, but a member of the Ornithocheiroidea *sensu* Kellner, closer to the Anhangueridae.[4] This means that using the alternative terminology of David Unwin they are close to the Ornithocheiroidea *sensu* Unwin, a group the members of which are typically more adapted to soaring and a piscivore, or fish-eating, diet.[3] Another publication following this general line of thought has put *Feilongus* and *Boreopterus* into a new ornithocheiroid family, the Boreopteridae.[5]

A 2018 phylogenetic analysis recovers *Feilongus* as a ctenochasmatid. Specifically, *Feilongus* is placed with its sister taxon *Moganopterus* in the subfamily Moganopterinae[6]:





See also

- List of pterosaur genera
- Timeline of pterosaur research

References

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External links

- *Feilongus* (https://web.archive.org/web/20070923154045/http://archosauria.org/pterosauria/taxonomy/genera/feilongus.html) in The Pterosauria

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